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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/579,371	05/26/2000	Krishna Kant	APP 1211-US	7615

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TELCORDIA TECHNOLOGIES, INC.  
ONE TELCORDIA DRIVE 5G116  
PISCATAWAY, NJ 08854-4157

EXAMINER

HOM, SHICK C

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/579,371

Applicant(s)

KANT ET AL.

Examiner

Shick C Hom

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 9,32,37 and 41 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-23,25 and 28-30 is/are allowed.
- 6) ☒ Claim(s) 1-3,10,13,17,24,26,27,31,33,36 and 38-40 is/are rejected.
- 7) ☒ Claim(s) 4-8,11,12,14,16,18-20,34 and 35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 1-41 have been considered but are moot in view of the new ground(s) of rejection.

### *Specification*

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 1-3, 10, 13, 15, 17, 24, 26-27, 31, 33, 36, and 38-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Beigi et al. (6,363,056).

Regarding claim 1:

Beigi et al. disclose the method for measuring network performance, said method comprising the steps of: dividing packets flowing through a first point into frames, the first point being any point in the network that supports a packet flow (see col. 3 lines 5-11, which recite generating probe packets for the plurality of packets clearly reads on dividing packet flow into frames); capturing information about the packets in packages that correspond to the frames; correlating each package with packets flowing through a second point, the second point being any other point in the network that supports the packet flow (see col. 3 line 41 to col. 4 line 14 which recite correlating the monitored flow of packets at the first and second points); and calculating network performance information based on the correlated packages (see col. 2 line 47 to col. 3 line 4 which recite monitoring network performance between the first and second point).

Regarding claim 3:

Beigi et al. disclose the method for measuring network performance, comprising the steps of: dividing packets flowing

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through a first point into frames (see col. 3 lines 5-11, which recite generating probe packets for the plurality of packets clearly reads on dividing packet flow into frames), the first point being any point in the network that supports a packet flow, said dividing step comprising selecting a header associated with the packets flowing through the first point; associating the header with the packet flow (see the header recited in col. 2 lines 31-46); storing the header in a storage associated with the packet flow (see col. 6 lines 23-46 which recite the copied header clearly reads on storing the header); incrementing a packet count (see col. 5 line 50 to col. 6 line 14); and detecting duplicate packets (see col. 56 to col. 4 line 14 which recite determining the round-trip delay of packet by reflecting the packet and comparing the time of generation reads on detecting duplicate packets, i.e. the reflected packet); capturing information about the packets in packages that correspond to the frames; correlating each package with packets flowing through a second point, the second point being any other point in the network that supports the packet flow (see col. 3 line 41 to col. 4 line 14); and calculating network performance information based on the correlated packages (see col. 2 line 47 to col. 3 line 4).

Regarding claim 10:

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Beigi et al. disclose the method for measuring network performance, comprising: dividing packets flowing through a first point into frames (see col. 3 lines 5-11, which recite generating probe packets for the plurality of packets clearly reads on dividing packet flow into frames), the first point being any point in the network that supports a packet flow; capturing information about the packets in packages that correspond to the frames; correlating each package with packets flowing through a second point, the second point being any other point in the network that supports the packet flow (see col. 3 line 41 to col. 4 line 14); and calculating network performance information based on the correlated packages (see col. 2 line 47 to col. 3 line 4); and wherein the step of capturing information comprises retrieving consecutive headers from a frame; and forming a package including information that uniquely identifies consecutive packets corresponding to the consecutive headers (see the header used for monitoring bandwidth in col. 6 lines 23-59).

Regarding claim 17:

Beigi et al. disclose the method for measuring network performance, comprising: dividing packets flowing through a first point into frames (see col. 3 lines 5-11, which recite generating probe packets for the plurality of packets clearly

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reads on dividing packet flow into frames), the first point being any point in the network that supports a packet flow; capturing information about the packets in packages that correspond to the frames; correlating each package with packets flowing through a second point, the second point being any other point in the network that supports the packet flow (see col. 3 line 41 to col. 4 line 14); storing in a storage a header associated with the packets flowing through the second point, said storing step comprising selecting the header, associating the header with the packet flow, storing the header in a storage location associated with the packet flow (see col. 6 lines 23-46 which recite the copied header clearly reads on storing the header), incrementing a packet count (see col. 5 line 50 to col. 6 line 14); and detecting duplicate packets (see col. 56 to col. 4 line 14 which recite determining the round-trip delay of packet by reflecting the packet and comparing the time of generation reads on detecting duplicate packets, i.e. the reflected packet); and calculating network performance information based on the correlated packages (see col. 2 line 47 to col. 3 line 4).

Regarding claim 31:

Beigi et al. disclose the system for measuring network performance comprising: at least a first and a second monitoring

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device for monitoring packets associated with a plurality of packet flows and connected to any point in the network; and at least a first and a second processing device for determining network performance information, each processing device respectively connected to each of the first and second monitoring devices (see col. 3 line 41 to col. 4 line 14); and wherein the first processing device comprises a source device that divides packets accessed via the first monitoring device into frames and captures information about the packets in packages corresponding to the frames (see col. 3 lines 5-11, which recite generating probe packets for the plurality of packets clearly reads on dividing packet flow into frames); and the second processing device comprises a destination device that correlates each package with packets accessed via the second monitoring device and that calculates the network performance information based on the correlated packages; wherein the monitoring devices monitor a packet flow from the plurality of packet flows (see col. 2 line 47 to col. 3 line 4).

Regarding claim 38:

Beigi et al. disclose the method for measuring performance of a network, said method comprising the steps of: dividing packets flowing through a first point into frames (see col. 3 lines 5-11, which recite generating probe packets for the



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plurality of packets clearly reads on dividing packet flow into frames), the first point being any point in the network that supports a packet flow; receiving information about the packets and the frames; correlating the received information with packets flowing through a second point, the second point being any point in the network that supports the packet flow (see col. 3 line 41 to col. 4 line 14); and calculating the performance of the network based on the correlated information (see col. 2 line 47 to col. 3 line 4).

Regarding claim 40:

Beigi et al. disclose the method for measuring performance of a network, said method comprising the steps of dividing packets flowing through a first point into frames, the first point being any point in the network that supports a packet flow (see col. 3 lines 5-11, which recite generating probe packets for the plurality of packets clearly reads on dividing packet flow into frames); and capturing information about the packets and frames, such that the information is correlated with packets flowing through a second point in the network that supports the packet flow (see col. 2 line 47 to col. 3 line 4), the step of capturing information comprising capturing information about the packets in packages that correspond to the frames (see col. 3 line 41 to col. 4 line 14).

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Regarding claim 2:

Beigi et al. disclose wherein the dividing step comprises: selecting a header associated with the packets flowing through the first point (see the header recited in col. 2 lines 31 to 46); associating the header with the packet flow; and storing the header in a storage associated with the packet flow (see the copied header recited in col. 6 lines 23-46).

Regarding claim 13:

Beigi et al. disclose wherein the step of retrieving consecutive headers further comprises: assigning a time stamp and locally-generated sequence number to each of the consecutive headers (see col. 8 lines 23-65).

Regarding claim 15:

Beigi et al. disclose storing in a storage a header associated with the packets flowing through the second point (see the copied header recited in col. 6 lines 23-46).

Regarding claim 24:

Beigi et al. disclose wherein the step of calculating network performance comprises: determining a number of packets lost between the first point and the second point in the network (see the abstract).

Regarding claim 26:

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Beigi et al. disclose wherein the step of calculating network performance comprises: determining a delay experienced by a packet flowing from the first point to the second point in the network (see col. 2 lines 47 to col. 3 line 29 and col. 1 lines 53-63).

Regarding claim 27:

Beigi et al. disclose wherein the step of determining the delay comprises: determining a first time at which a packet associated with a correlated package flows through the first point in the network; determining a second time at which the packet flows through the second point in the network; and subtracting the first time from the second time (see col. 9 lines 13-31).

Regarding claim 33:

Beigi et al. disclose wherein the source device includes a processor for selecting a header associated with the packets accessed via the first monitoring device (see col. 2 lines 31-46), for associating the header with the packet flow, and for storing the header in a storage (see col. 6 lines 23-46).

Regarding claim 36:

Beigi et al. disclose wherein the packages include a packet flow identifier, a frame number, and a package size (see the

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abstract, col. 8 lines 23-35, and col. 8 line 66 to col. 9 line 15).

Regarding claim 39:

Beigi et al. disclose wherein the step of receiving information comprises: receiving packages that correspond to the frames and that include information about the packets and the frames (see col. 6 lines 4-13, col. 10 lines 9-24, and col. 10 line 64 to col. 11 line 8).

#### ***Allowable Subject Matter***

5. Claims 21-23, 25, and 28-30 allowed.

6. Claims 4-8, 11-12, 14, 16, 18-20, and 34-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Drysdale et al. disclose a method and apparatus for performing service level analysis of communications network performance metrics.

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8. Any response to this nonfinal action should be mailed to:

Commissioner of Patents and Trademarks  
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or faxed to:

(703) 872-9306, (for Technology Center 2600 only)

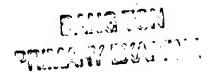
Hand-delivered responses should be brought to Crystal  
Park II, 2121 Crystal Drive, Arlington, VA., Sixth  
Floor (2600 Receptionist at (703) 305-4750).

Any inquiry concerning this communication or earlier  
communications from the examiner should be directed to Shick Hom  
whose telephone number is (703) 305-4742. The examiner's  
regular work schedule is Monday to Friday from 8:00 am to 5:30  
pm EST and out of office on alternate Friday.

If attempts to reach the examiner by telephone are  
unsuccessful, the examiner's supervisor, Seema Rao, can be  
reached at (703) 308-5463.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

A handwritten signature in black ink, appearing to be 'JMT'.A faint, rectangular stamp with illegible text, possibly a date or office mark.

SH

April 7, 2004